

CLAIMS

1. A method for performing a soft-handoff in a mobile streaming media system, said method comprising the steps of:

- 5 a) detecting that a channel quality between a mobile client and a first base station remains above a drop threshold and that a channel quality between said mobile client and a second base station increases from below to above and add threshold; and
- 10 b) sending a first multiple description bitstream from said first base station to said mobile client and sending a second multiple description bitstream from said second base station to said mobile client.

2. The method for performing a soft-handoff in a mobile streaming media system as recited in Claim 1, further comprising the steps of:

- 15 prior to said step a) said sending said first multiple description bitstream and said second multiple description bitstream from said first base station to said mobile client such that said mobile client receives said first multiple description bitstream and said second multiple description bitstream from said first base station.

20

3. The method for performing a soft-handoff in a mobile streaming media system as recited in Claim 2, wherein said step a) further comprises the step of:

- 25 i) ceasing sending said second multiple description bitstream from said first base station to said mobile client.

4. The method for performing a soft-handoff in a mobile streaming media system as recited in Claim 1, further comprising the steps of:

- 30 c) detecting that said channel quality from said first base station to said mobile client drops below a drop threshold value; and
- d) dropping said channel between said first base station and said mobile client such that said mobile client does not receive said first multiple description bitstream from said first base station.

35 5. The method for performing a soft-handoff in a mobile streaming media system as recited in Claim 1, further comprising the step of:

- e) upon dropping said channel between said first base station and said mobile client, sending said first multiple description bitstream from said second base station to said mobile client such that said mobile client

receives said first multiple description bitstream and said second multiple description bitstream from said second base station.

5 6. A computer readable medium having computer readable code stored thereon for causing a network device to perform a soft-handoff in a mobile streaming media system, said method comprising the steps of:

a) detecting that a channel quality between a mobile client and a first base station remains above a drop threshold and that a channel quality between said mobile client and a second base station increases  
10 from below to above an add threshold; and

b) sending a first multiple description bitstream from said first base station to said mobile client and sending a second multiple description bitstream from said second base station to said mobile client.

15 7. The computer readable medium of Claim 6 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform the step of:

prior to said step a) said sending said first multiple description bitstream and said second multiple description bitstream from said first  
20 base station to said mobile client such that said mobile client receives said first multiple description bitstream and said second multiple description bitstream from said first base station.

25 8. The computer readable medium of Claim 7 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device performing said step a) to further perform the step of:

i) ceasing sending said second multiple description bitstream from said first base station to said mobile client.

30 9. The computer readable medium of Claim 6 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform the steps of:

c) detecting that said channel quality from said first base station to  
35 said mobile client drops below a drop threshold value; and

d) dropping said channel between said first base station and said mobile client such that said mobile client does not receive said first multiple description bitstream from said first base station.

10. The computer readable medium of Claim 6 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform the step of:

- 5 e) upon dropping said channel between said first base station and said mobile client, sending said first multiple description bitstream from said second base station to said mobile client such that said mobile client receives said first multiple description bitstream and said second multiple description bitstream from said second base station.

10 11. A method for performing a hard-handoff in a mobile streaming media system, said method comprising the steps of:

- a) detecting a mobile client seeking to establish a communication channel with a base station;
- 15 b) determining if said base station has sufficient capacity to provide at least one of a plurality of multiple description bitstreams to said mobile client;
- 20 c) provided said base station does have sufficient capacity to provide said at least one of said plurality of multiple description bitstreams to said mobile client, said base station providing said at least one of said plurality of multiple description bitstreams to said mobile client;
- 25 d) provided the base station does not have sufficient capacity to provide said at least one of said plurality of multiple description bitstreams to said mobile client, determining if an existing mobile client is presently receiving more than one of said plurality of multiple description bitstreams from said base station; and
- 30 e) provided said existing mobile client is presently receiving more than one of said plurality of multiple description bitstreams from said base station, allocating at least one of said plurality of multiple description bitstreams being received by said existing mobile client to said mobile client.

12. The method for performing a hard-handoff in a mobile streaming media system as recited in Claim 11, further comprising the step of:

- 35 f) provided said existing mobile client is not presently receiving more than one of said plurality of multiple description bitstreams from said base station, repeating step b) and appropriate following steps.

13. The method for performing a hard-handoff in a mobile

streaming media system as recited in Claim 11 wherein said step c) is performed without causing service disruption for said existing mobile client.

5           14. The method for performing a hard-handoff in a mobile streaming media system as recited in Claim 11 wherein said step e) is performed without causing service disruption for said existing mobile client.

10           15. The method for performing a hard-handoff in a mobile streaming media system as recited in Claim 11 wherein said step c) is performed without causing service disruption for said mobile client.

15           16. The method for performing a hard-handoff in a mobile streaming media system as recited in Claim 11 wherein said step e) is performed without causing service disruption for said mobile client.

20           17. A computer readable medium having computer readable code stored thereon for causing a network device to perform a hard-handoff in a mobile streaming media system, said method comprising the steps of:

a) detecting a mobile client seeking to establish a communication channel with a base station;

25           b) determining if said base station has sufficient capacity to provide at least one of a plurality of multiple description bitstreams to said mobile client;

c) provided said base station does have sufficient capacity to provide said at least one of said plurality of multiple description bitstreams to said mobile client, said base station providing said at least one of said plurality of multiple description bitstreams to said mobile client;

30           d) provided the base station does not have sufficient capacity to provide said at least one of said plurality of multiple description bitstreams to said mobile client, determining if an existing mobile client is presently receiving more than one of said plurality of multiple description bitstreams from said base station; and

35           e) provided said existing mobile client is presently receiving more than one of said plurality of multiple description bitstreams from said base station, allocating at least one of said plurality of multiple description bitstreams being received by said existing mobile client to said mobile client.

18. The computer readable medium of Claim 17 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform the step of:

- 5        f) provided said existing mobile client is not presently receiving more than one of said plurality of multiple description bitstreams from said base station, repeating step b) and appropriate following steps.

10       19. The computer readable medium of Claim 17 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform said step c) without causing service disruption for said existing mobile client.

15       20. The computer readable medium of Claim 17 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform said step e) without causing service disruption for said existing mobile client.

20       21. The computer readable medium of Claim 17 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform said step c) without causing service disruption for said mobile client.

25       22. The computer readable medium of Claim 17 wherein said computer readable medium further includes computer readable code stored thereon for causing said network device to perform said step e) without causing service disruption for said mobile client.